

Application No. 10/803,722
Amendment dated June 7, 2005
Reply to Office Action of April 14, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

CLAIMS:

Please amend claims 8, 9, 17, and 18, and cancel claims 1-7 and 10-16, as follows:

1-7. (Canceled)

8. (Currently Amended) ~~The method of claim 1, further comprising~~ A method for estimating altitude, comprising:

generating a drift error model based on repeated measurements at a fixed coordinate location;

determining a time lapse since a last altitude calibration;

obtaining, from said drift error model, an expected error in altitude readings based on the time lapse since the last altitude calibration;

calculating an estimated altitude based on the expected error; and

comparing drift model measurements with one another to determine a range over which barometric pressure varies within predetermined periods of time.

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9. (Currently Amended) ~~The method of claim 1, further comprising~~ A method for estimating altitude, comprising:

determining a time lapse since a last altitude calibration;

obtaining, from a drift error model, an expected error in altitude readings based on the time lapse since the last altitude calibration;

calculating an estimated altitude based on the expected error; and

storing, in the drift error model, predetermined ranges over which barometric pressure varies within discrete periods of time.

10-16. (Canceled)

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17. (Currently Amended) ~~The system of claim 10,~~ A system for estimating altitude, comprising:

an input receiving altitude readings;

a processor determining a time lapse since a last altitude calibration;

memory storing a drift error model containing an expected error in the altitude

readings based on the time lapse since the last altitude calibration, said

processor calculating an estimated altitude based on the expected error,

wherein said drift error model is generated based on repeated

measurements at a fixed coordinate location; and

wherein said said processor determines a range over which barometric pressure varies within predetermined periods of time, based on comparing drift error model measurements with one another.

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18. (Currently Amended) ~~The system of claim 10,~~ A system for estimating altitude,
comprising:

an input receiving altitude readings;

a processor determining a time lapse since a last altitude calibration;

memory storing a drift error model containing an expected error in the altitude
readings based on the time lapse since the last altitude calibration, said
processor calculating an estimated altitude based on the expected error; and

wherein said memory stores, in said drift error model, predetermined ranges over
which barometric pressure varies during within discrete periods of time.